# SOUTH CAVALCADE STREET

TEXAS

EPA ID# TXD980810386

# EPA REGION 6 CONGRESSIONAL DISTRICT 18

Harris County

Updated: February 6, 2003

# Site Description

Location: ! The site is located at the southeast intersection of Cavalcade & Maury Streets,

about two miles southwest of the intersection of Loop 610 North & U.S. 59.,

Houston, Harris County, Texas.

Population: • Approximately 4,500 people live within a one-mile radius of the

site.

Setting: ! The nearest residence to this site is 200 feet to the west, and the nearest water

well is about 1,500 feet from site. However, the aquifers to be remediated are not being used as water supplies, nor are they likely to be used because there are

available water sources in the area.

! This 66-acre site was used as a wood treating facility from 1910 to 1962.

! All original facilities were removed about 1962, and the site was covered with 1-2

feet of fill material.

! Two-thirds of the site were developed by three palletized trucking firms with large

warehouses; the center third of the property is vacant.

Hydrogeology: ! The subsurface consists of interbedded clays, silts and sands of the Beaumont

formation.

# Current Site Strategy -

The objective of this site cleanup is to protect human health and the environment by controlling the migration of shallow groundwater contaminants so as to reduce and/or eliminate the potential of contaminating deeper aquifers, and if possible restore the shallow groundwater to a potential future beneficial use. In addition, contaminated surface soils are being capped with reinforced concrete to prevent inadvertent dermal contact and ingestion. Construction of the concrete cap construction began November 1999 and was completed July 2000. Beazer East, the responsible party (RP), is presently removing creosote from the shallow aquifer and conducting studies to determine how to best control contaminant migration.

# Wastes and Volumes

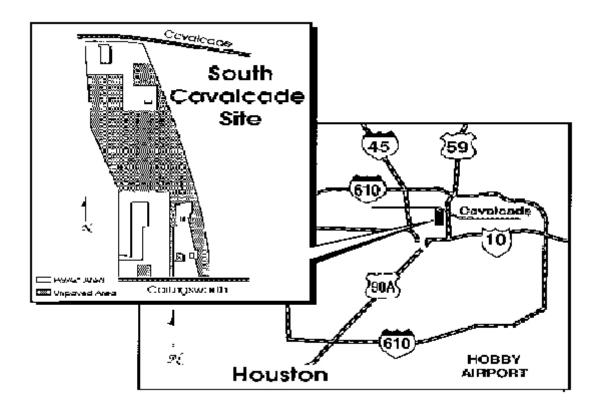
- ! The principal pollutants at the site include creosote and wood treating metal salts.
- ! Soils & ground water contaminated with creosote related compounds.
- ! The volume of contaminated soils at the site is approximately 7,000 cubic yards, now contained beneath a cap.

# Site Assessment and Ranking -

## NPL LISTING HISTORY

Site HRS Score: 38.69 Proposed Date: 10/5/84 Final Date: 6/10/86 NPL Update: No. 2

Site Map and Diagram



## The Remediation Process -

#### ! Site History

- Wood treatment facility operated by National Lumber and Creosoting Company began operation in 1910 and continued until 1938.
- Koppers Co., Inc., now Beazer East, Inc., purchased the facility in 1938 and continued wood treating operations and opened a coal tar distillation facility.
- Operations ceased in 1962, and the site was cleared and sold in 1962.
- Presently, three trucking firms operate warehouse and terminal operations at the site: Palletized Trucking, Trucking Properties and Nations Way.
- The Remedial Investigation and Feasibility Study (RI/FS) for this site was completed in September 1988, conducted by the potentially responsible parties (PRPs) under EPA oversight.
- The Remedial Design (RD) for this site was completed in January 1995.
- The soil remedy was changed from soil washing to a reinforced concrete cap in June 1997.
- Beazer and EPA negotiated a change to the consent decree for the soil remedy in 1998.

#### ! Health Considerations:

Primary risks from the site stem from the carcinogenic polynuclear aromatic hydrocarbons (cPAHs) found in the creosote. These compounds are in the soil and ground water.

## Record of Decision —

Signed: September 26, 1988 Amended June 27, 1997

This remedy will protect humans from unhealthy exposures to contaminated soil and ground water.

#### ! Ground Water:

The Record of Decision (ROD) called for ground water remediation using physical/chemical separation of contaminants, followed by filtration and activated carbon adsorption to remove all particulates and organic compounds.

#### Soil:

The remedy was amended in June 1997. The original remedy was soil washing and soil flushing; however full scale work in the field determine these remedies were not effective. The amended remedy selected a cap, which was constructed with reinforced concrete to provide for continued use of the contaminated soil area for tractor trailer parking.

#### **Other Remedies Considered**

#### **Reason Not Chosen**

"No Action"
Soil washing and flushing
Offsite landfill
Does not meet remedial objectives
Remedy failed in field testing
Not as effective as selected remedy

4. On-site incineration Difficult to implement, not accepted by community

5. In Situ bioremediation Not as effective as selected remedy

6. Offsite incineration Cost effectiveness

7. In Situ biotreatment of ground water Not as effective as selected remedy

8. Carbon adsorption, air stripping Implementation problems9. Aerated tank treatment-ground water Cost effectiveness

- The Remedial Design (RD) began in 7/90 and was completed 1/95.
- ! The Remedial Action (RA), construction of the site remedy, began in the summer of 1995.
- An amendment to the ROD was proposed on 2/9/97. This amendment proposed changing the soil remedy from soil washing / flushing to capping all contaminated soils with concrete.

## Enforcement

! Consent Decree for RD/RA signed by EPA and Beazer East March 14, 1991

# Community Involvement —

- ! Community Involvement Plan: Developed 3/85, revised 2/89 and again 7/91.
- ! Open houses and workshops: 9/85, 4/92, 1/93
- ! Proposed Plan Fact Sheet and Public Meeting: 8/88
- ! ROD Fact Sheet: 10/88
- ! Consent Decree Fact Sheet: 9/90
- ! Remedial Design Fact Sheet: 5/91
- ! Remedial Design Progress Fact Sheet: 3/91
- ! Superfund Site Update Remedial Design Completed 3/95
- ! Milestone Fact Sheets: 4/87, 7/87, 9/90, 5/91, 4/92
- ! Citizens on site mailing list: 56
- ! Constituency Interest: Low no specific concerns, just desire for the site to be cleaned up.
- Public meeting for proposed ROD amendment held 2/20/97
- ! Notice of Five-Year Review published in the Houston Chronicle zone newspaper 8/08/02 and mailed to citizens on the site mailing list.
- ! Site Repository:
  - Houston Central Library, Government Documents Area, 500 McKinney Street, Houston, TX 77002

#### Technical Assistance Grant

- ! Availability Notice: 4/4/89 Re-advertised 9/90 (mailing)
- ! Letters of Intent Received:
  - 1) LIFT Endowment Fund, Inc. 2/8/90 (withdrawn)
  - Final Application Received: N. & S. Cavalcade St. Group 12/93 and 9/94.
  - " Grant Award: Applications denied.
- ! Current Status: No TAG

#### Contacts

- ! Remedial Project Manager (EPA): Camille Hueni, 214-665-2231, Mail Code: 6SF-AP
- ! State Contact (TCEQ): Carol Dye, 512-239-1504, Mail Code 143
- ! Community Involvement (EPA): Camille Hueni, 214-665-2231, Mail Code: 6SF-AF
- ! Attorney (EPA): Paul Wendel, 214-665-2136, Mail Code: 6RC-S
- ! State Coordinator (EPA): Karen Bond 214-665-6682, Mail Code: 6SF-AP
- ! Region 6 Ombudsman: Arnold Ondarza (303) 312-6777
- **Toll Free Number:** 1-800-533-3508

# Present Status and Issues ———

#### ! Current

- The DNAPL (dense non aqueous phase liquid) extraction system, in operation since 1996, has removed approximately 2800 gallons of product to date. Recovery of DNAPL has been ongoing in three Ground Water Remedial Action Areas.
- Because DNAPL is present, ground water cleanup goals may not be achievable. The RP initiated a study in 1996 to determine to what degree cleanup is feasible. The study indicated that monitored natural attenuation may be possible if the DNAPL is removed to the maximum extent possible. EPA gave Beazer approval to initiate work plan activities to gather additional data to support a monitored natural attenuation option. Beazer has submitted that information as the *Groundwater Fate and Transport Evaluation Report*, for review and discussion.
- In November 1999, Beazer began placing a concrete cap on the contaminated surface soil at the site. The construction of the cap was completed July 2000.
- The Preliminary Closeout Report was approved by EPA Region 6 on September 15, 2000, establishing construction completion for the Site, for both the ground water and soils.
- Review in Progress: The initial Five-Year Review was completed September 25, 2002. The Five-Year Review evaluated the effectiveness of both the soil and ground water remedies to correct contamination problems and to protect human health and the environment. The results of the Five-Year Review are available to the public at the information repository at:

Houston Central Library Government Documents area 500 McKinney Street Houston, Texas 77002

#### Future

- ' Spring 2003
  - EPA, TCEQ, and the RP will meet to discuss the additional information submitted to support a monitored natural attenuation remedial option in the *Groundwater Fate and Transport Evaluation Report*. DNAPL recovery-to-date and optimization of the current system will also be discussed.

## Schedule

- WASTELAN Data Base Schedule Milestones
  - " Remedial Action
    - Preliminary Close Out Report September 2000
    - Close Out Report 2025

"	First 5-Year Review	September 2002
"	NPL Deletion	2026

! The remedy will prevent off-site migration of contaminated groundwater, while allowing continued commercial use of the property.